

A NEW SPECIES OF *ERIOCHLOA* FROM THE  
HAWKESBURY RIVER.

BY A. A. HAMILTON.

[N.O. *Gramineae*.]

*ERIOCHLOA MAIDENII*, n.sp.

Hawkesbury River (A. A. Hamilton; May, 1912).

A scrambling perennial grass, with slender but rigid decumbent stems, and ascending branches. Stems many-jointed, occasionally rooting. Leaves from under  $\frac{1}{2}$  to rarely above 1 inch long, from narrow to broad lanceolate, flat or concave, with a pale thickened margin, the short leaf-sheath and ligula ciliate with long silky hairs; leaves and stems sparingly sprinkled with short hairs, the hairs on all parts of the plant with a bulbous base. Inflorescence reduced to a spike, seldom above 1 inch long, usually shorter, the terminal spike on a peduncle of  $\frac{1}{2}$  to  $1\frac{1}{2}$  inch, the lateral ones on short branches partly immersed in the leaf-sheaths; rhachis triquetrous; peduncle, rhachis, and pedicels scabrous. Spikelets at the base of the spike paniculate, 2-3 or occasionally 4 in a short raceme; the upper ones solitary, 1 line long, acute, oblong-ovate, not callous at the base; lower pedicels 1 line long, with a tuft of silky hairs at the base; the upper ones shorter, the tuft of hairs diminishing upwards; top of the pedicel cup-shaped, the short stipes of the spikelet in the centre of the depression. Glumes three, two outer empty, nearly equal, with five prominent, parallel nerves, and two shorter, marginal ones, acute, herbaceous, with pale narrow, hyaline margins and apex, pubescent at the base, sparingly so at apex; no rudimentary palea present. Flowering glume coriaceous, obtuse, nearly as long as the outer glumes, with a point or awn  $\frac{1}{4}$  line long, exserted. Fruit smooth, its back usually turned from the rhachis. Grain enclosed in the flowering glume and palea

(both much involute), free, hardened, glassy, ovoid, not dorsally flattened. Embryo one-third the length of the grain. Hilum basal, punctiform.

A distinct species, which may eventually, in conjunction with other ambiguous species, be incorporated as a separate genus.

In the Fl. Austr., (vii., p. 459) Bentham, describing the genus *Paspalum*, gives the characters: "Spikelets . . . not awned, not calous at the base." In a footnote to the description of the genus *Eriochloa*, Hooker, (Fl. Brit. Ind., vii., p. 20) says: "The thickened base of the spikelet alone distinguishes *Eriochloa* from *Paspalum*." This decision appears to be somewhat arbitrary, as in the present instance the herbaceous seven-nerved outer glumes and the hardened glassy grain, which is not dorsally flattened, are characteristic of *Panicum* rather than *Paspalum*; the inflorescence also, "a character admitted as generic in most Gramineæ," (Bentham, Fl. Austr., vii., p. 463) approaches *Panicum*, being similar to that of *P. marginatum* R.Br., var. *strictum*, a plant to which it has a superficial resemblance in the field. Most modern authors include, under the genus *Panicum*, only those species which have four glumes, an exception being a form of *P. sanguinale* Linn., in which the small, outer glume is occasionally deficient. In *P. helopus* Trin., we find the awn on the flowering glume as in *Eriochloa*, but the presence of the small outer glume proclaims it a true *Panicum*.

The characters, glumes three, awn on the flowering glume, and the somewhat composite inflorescence, appear to be a sufficient warrant for placing this grass provisionally in the genus *Eriochloa*. Its nearest ally may be found in *E. annulata* Kunth, the inflorescence in some forms of this species being reduced to an interrupted spike.

The Australian species of *Eriochloa* given in the Fl. Austr., are *E. punctata* Hamilt., and *E. annulata* Kunth, with the var. *acrotricha* Benth. Both these species are placed under *E. polystachya* H.B.K., by Hooker, Fl. Brit. Ind., (vii., 20).

In the Queensland Agricultural Journal (i., 234), Bailey describes a decumbent species of *Eriochloa* (*E. decumbens* Bail.) from Hammond Island, Torres Straits. He mentions, in a note,

that it differs from other Australian species of the genus principally in habit.

This grass was found growing in a gully in the neighbourhood of the Hawkesbury River, in large patches, forming a closely matted undergrowth. Under favourable conditions, it should spread rapidly; and though the stems are somewhat wiry, they carry a fair amount of foliage. It may prove of some value as a winter fodder, as I found it close cropped in August.

The name is proposed with a view to the identification of Mr. J. H. Maiden, Government Botanist of New South Wales, with a Natural Order, concerning which he has furnished so much valuable information.

The type-specimens will be presented to the National Herbarium.